



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,021	10/17/2001	Tsuyoshi Okada	991409A	4269

23850 7590 01/28/2003

ARMSTRONG, WESTERMAN & HATTORI, LLP  
1725 K STREET, NW  
SUITE 1000  
WASHINGTON, DC 20006

EXAMINER

KASTLER, SCOTT R

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 01/28/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/978,021

Applicant(s)

OKADA ET AL

Examiner

Scott Kastler

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/462,291.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1742

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art of the instant disclosure in view of . The admitted prior art of the instant disclosure teaches that it was well known at the time the invention was made to arrange a steelmaking plant next to a power plant (which could be either coal or oil fired) and a petrochemical complex (an oil refining plant) as well as arranging these plants near waterways (see page 1 of the instant specification for example). The admitted prior art of the instant disclosure further teaches that it was known at the time the invention was made to deliver waste products from one industrial plant to another industrial plant in order to improve efficiency and reduce environmental impact of the industrial plants as well as the treatment of any waste materials generated within the complex of plants within the plant complex itself (see page 2 of the instant specification for example). The admitted prior art of the instant disclosure thereby shows all aspects of the above claims except the steps of specifically including a cement plant within the industrial complex, delivering products from the plants to locations outside of the complex, or supplying specific waste materials to specific plants within the complex. Both of Greenwalt'375 and Greenwalt'862 teach, in the embodiments of respective figures 1 for example, that it was well known at the time the invention was made to include a cement production (the construction products, 52) facility (plant) in a steel making complex in order to efficiently use slag and slag

Art Unit: 1742

dust products from the steel making facility. GB'384 further teaches that it was a well known expedient at the time the invention was made to include units dealing with the treatment of waste materials within industrial plant complexes themselves (see page 1, lines 12-21 and page 2 lines 60-64 for example), in particular sulfur containing waste gases (see page 6, claim 8 for example). It is further noted by the Examiner to be a well known expedient to deliver products from an industrial plant to locations outside of the plant itself since this is the entire purpose of the plant (production and delivery of products to others). Because increase in the efficiency and lessening the environmental impact of the industrial plants of the complex of the admitted prior art of the instant disclosure would be desirable in the industrial complex shown by the admitted prior art of the instant disclosure, motivation to include a cement plant in the complex, as shown by both of Greenwalt'862 and Greenwalt'375 as a modification that enables more efficient use of slag and dust generated in a steelmaking process, and treatment or use of other waste materials within the industrial complex of the admitted prior art of the instant disclosure itself rather than the shipping of the waste materials to remote locations, as taught by GB'384 in order to further increase efficiency of the industrial complex as a whole, would have been modifications obvious to one of ordinary skill in the art at the time the invention was made.

### *Conclusion*


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Each of von Bogandy et al, Lehto, Johnson and Uematsu et al are also cited as further examples of prior art steel making systems in which waste products are employed in associated processes.

Art Unit: 1742

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (703) 308-2506. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703) 308-3050. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.



Scott Kastler  
Primary Examiner  
Art Unit 1742

sk  
January 23, 2003